Geotechnical Testing Journal
Author Index
Volume 23, 2000

Number	Month of Issue	Pages
1	March	3–111
2	June	141–256
3	September	257–388
4	December	389–552

A

Abduljauwad, SN: *see* Azam, S, Abduljauwad, SN, Al-Shayea, NA, and Baghabra Al-Amoudi, OS

Al-Shayea, NA: *see* Azam, S, Abduljauwad, SN, Al-Shayea, NA, and Baghabra Al-Amoudi, OS

Alawneh, AS and Husein Malkawi, AI: Estimation of Post-Driving Residual Stresses, Sept., 313

Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA: Assessment of Localized Deformations in Sand Using X-Ray Computed Tomography, Sept., 274

Arulnathan, R, Boulanger, RW, Kutter, BL, and Sluis, WK: New Tool for Shear Wave Velocity Measurements in Model Tests, Dec., 444

Ashmawy, AK: *see* Saussus, DR, Frost, D, and Ashmawy, AK

Assaad, A: *see* Muhunthan, B, Masad, E, and Assaad, A

Ata, A and O'Neill, M.: The Physicochemical Interaction Between PHPA Polymer Slurry and Cement Mortar, June, 225

Azam, S, Abduljauwad, SN, Al-Shayea, NA, and Baghabra Al-Amoudi, OS: Effects of Calcium Sulfate on Swelling Potential of an Expansive Clay, Dec., 389

B

Baghabra Al-Amoudi, OS: *see* Azam, S, Abduljauwad, SN, Al-Shayea, NA, and Baghabra Al-Amoudi, OS

Batiste, SN: *see* Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA

Birgisson, B.: *see* McVay, MC, Birgisson, B., Zhang, L, Perez, A, and Putcha, S

Bonala, M: *see* Reddi, LN, Lee, IM, and Bonala, M

Boulanger, RW: *see* Arulnathan, R, Boulanger, RW, Kutter, BL, and Sluis, WK

Breysse, D: *see* Kouassi, P, Breysse, D, Girard, H, and Poulain, D

C

Cakmakci, G: *see* Unal, E and Cakmakci, G

Cardoso, ET: *see* de Sousa Coutinho, AntonioGF, Emilio, FT, de Almeida Garrett, JL, and Cardoso, ET

Chapman, DN: *see* Reddy, ES, Chapman, DN, and Sastry, VV

Chien, LK and Oh, YN: Laboratory and Field Shear Wave Measurement at a Reclaimed Site in West Taiwan, March, 21

Chu, J: *see* Leong, WK, Chu, J, and Teh, CI

Connolly, TM: *see* Kuwano, R, Connolly, TM, and Jardine, RJ

Costes, NC: *see* Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA

D

de Almeida Garrett, JL: *see* de Sousa Coutinho, AntonioGF, Emilio, FT, de Almeida Garrett, JL, and Cardoso, ET

de Sousa Coutinho, AntonioGF, Emilio, FT, de Almeida Garrett, JL, and Cardoso, ET: Instrumentation of Bored Concrete Piles for Horizontal Load Tests, Sept., 327

Deschamps, RJ: *see* Siddiqui, SI, Drnevich, VP, and Deschamps, RJ

Drnevich, VP: *see* Siddiqui, SI, Drnevich, VP, and Deschamps, RJ

E

El Neggar, MH and Wei, JQ: Cyclic Response of Axially Loaded Tapered Piles, March, 100

Emilio, FT: *see* de Sousa Coutinho, AntonioGF, Emilio, FT, de Almeida Garrett, JL, and Cardoso, ET

Esaki, T: *see* Zhang, M, Takahashi, M, Morin, RH, and Esaki, T

F

Fang, H-Y: *see* Kaya, A, Lloyd, TB, and Fang, H-Y

Feng, ZY and Sutter, KG: Dynamic Properties of Granulated Rubber/Sand Mixtures, Sept., 338

Flora, A: *see* Modoni, G, Flora, A, Mancuso, C, Viggiani, C, and Tatsuoka, F

Fox, PJ: *see* Sivakumar Babu, GL and Fox, PJ

Frank, ML: *see* Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA

Fratta, D: *see* Prada, J, Fratta, D, and Santamarina, JC

Frost, D: *see* Saussus, DR, Frost, D, and Ashmawy, AK

G

Gabr, MA and Hart, JH: Elastic Modulus of Geogrid-Reinforced Sand Using Plate Load Tests, June, 245

Gangadhara, S: *see* Subba Rao, KS, Sudhakar, MR, and Gangadhara, S

Girard, H: *see* Kouassi, P, Breysse, D, Girard, H, and Poulain, D

© 2000 by the American Society for Testing and Materials

Graham, J: *see* Tang, GX and Graham, J

Gunaratne, M: *see* Hameed, RA, Gunaratne, M, Putcha, S, Kuo, C, and Johnson, S

Gyr, P: *see* Perkins, SW, Gyr, P, and James, G

H

Hameed, RA, Gunaratne, M, Putcha, S, Kuo, C, and Johnson, S: Lateral Load Behavior of Jetted Piles, Sept., 358

Hart, JH: *see* Gabr, MA and Hart, JH

Husein Malkawi, AI: *see* Alawneh, AS and Husein Malkawi, AI

I

Ismail, MA, Joer, HA, and Randolph, MF: Sample Preparation Technique for Artificially Cemented Soils, June, 171

J

James, G: *see* Perkins, SW, Gyr, P, and James, G

Jardine, RJ: *see* Kuwano, R, Connolly, TM, and Jardine, RJ

Joer, HA: *see* Ismail, MA, Joer, HA, and Randolph, MF

Johnson, S: *see* Hameed, RA, Gunaratne, M, Putcha, S, Kuo, C, and Johnson, S

K

Katz, A: *see* Talesnick, ML, Katz, A, and Ringel, M

Kaya, A, Lloyd, TB, and Fang, H-Y: Interfacial Parameters and Work of Adhesion in Soil-Liquid Systems, Dec., 464

Khalifa, M-AOA, Wahyudi, I, and Thomas, P: A New Device for Measuring Permeability Under High Gradients and Sinusoidal Gradients, Dec., 404

Kim, D-S and Kweon, G-C: Calibration of Testing Equipment for Reliable Small-Strain Deformation Measurements Using Synthetic Specimens, Dec., 454

Kim, MH, O'Neill, MW, and Kramer, SL: Performance of Drilled Shafts with Isolation Tubes in an Expansive Environment, Sept., 345

Kouassi, P, Breysse, D, Girard, H, and Poulain, D: A New Technique of Kneading Compaction in the Laboratory, March, 72

Kramer, SL: *see* Kim, MH, O'Neill, MW, and Kramer, SL

Krishnaswamy, NR, Rajagopal, K, and Lathar, GM: Model Studies on Geocell Supported Embankments Constructed over a Soft Clay Foundation, March, 45

Kuo, C: *see* Hameed, RA, Gunaratne, M, Putcha, S, Kuo, C, and Johnson, S

Kutter, BL: *see* Arulnathan, R, Boulanger, RW, Kutter, BL, and Sluis, WK

Kuwano, R, Connolly, TM, and Jardine, RJ: Anisotropic Stiffness Measurements in a Stress-Path Triaxial Cell, June, 141

Kweon, G-C: *see* Kim, D-S and Kweon, G-C

L

Lake, CB: *see* Rowe, RK, Lake, CB, and Petrov, RJ

Lankton, MR: *see* Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA

Lathar, GM: *see* Krishnaswamy, NR, Rajagopal, K, and Lathar, GM

Lee, IM: *see* Reddi, LN, Lee, IM, and Bonala, M

Leong, WK, Chu, J, and Teh, CI: Liquefaction and Instability of a Granular Fill Material, June, 178

Likos, WJ: *see* Lu, N, Ristow, GH, and Likos, WJ

Lloyd, TB: *see* Kaya, A, Lloyd, TB, and Fang, H-Y

Lu, N, Ristow, GH, and Likos, WJ: The Accuracy of Hydrometer Analysis for Fine-Grained Clay Particles, Dec., 487

M

Mancuso, C: *see* Modoni, G, Flora, A, Mancuso, C, Viggiani, C, and Tatsuoka, F

Marinho, FAM: *see* Marinho, FAM

Masad, E: *see* Muhunthan, B, Masad, E, and Assaad, A

Masterson, KL: *see* Shang, JQ and Masterson, KL

McVay, MC, Birgisson, B., Zhang, L, Perez, A, and Putcha, S: Load and Resistance Factor Design (LRFD) for Driven Piles Using Dynamic Methods—a Florida Perspective, March, 55

Modoni, G, Flora, A, Mancuso, C, Viggiani, C, and Tatsuoka, F: Evaluation of Gravel Stiffness by Pulse Wave Transmission Tests, Dec., 506

Mohammed, LN: *see* Titi, HH, Mohammed, LN, and Tumay, MT

Morin, RH: *see* Zhang, M, Takahashi, M, Morin, RH, and Esaki, T

Muhunthan, B, Masad, E, and Assaad, A: Measurement of Uniformity and Anisotropy in Granular Materials, Dec., 423

O

O'Neill, M.: *see* Ata, A and O'Neill, M.

O'Neill, MW: *see* Kim, MH, O'Neill, MW, and Kramer, SL

Oh, YN: *see* Chien, LK and Oh, YN

P

Paikowsky, SG and Xi, F: Particle Motion Tracking Utilizing a High-Resolution Digital CCD Camera, March, 123

Perez, A: *see* McVay, MC, Birgisson, B., Zhang, L, Perez, A, and Putcha, S

Perkins, SW, Gyr, P, and James, G: The Influence of Biofilm on the Mechanical Behavior of Sand, Sept., 300

Petrov, RJ: *see* Rowe, RK, Lake, CB, and Petrov, RJ

Poulain, D: *see* Kouassi, P, Breysse, D, Girard, H, and Poulain, D

Prada, J, Fratta, D, and Santamarina, JC: Tomographic Detection of Low-Velocity Anomalies with Limied Data Sets (Velocity and Attenuation), Dec., 472

Prakash, K: *see* Sridharan, A. and Prakash, K

Prakash, K.: *see* Sridharan, A. and Prakash, K.

Putcha, S:
see Hameed, RA, Gunaratne, M, Putcha, S, Kuo, C, and Johnson, S
see McVay, MC, Birgisson, B., Zhang, L, Perez, A, and Putcha, S

R

Rajagopal, K: *see* Krishnaswamy, NR, Rajagopal, K, and Lathar, GM

Randolph, MF: *see* Ismail, MA, Joer, HA, and Randolph, MF

Rassam, DW and Williams, DJ: A Dynamic Method for Determining the Soil

Water Characteristic Curve for Coarse-Grained Soils, March, 67

Reddi, LN, Lee, IM, and Bonala, M: Comparison of Internal and Surface Erosion Using Flow Pump Tests on a Sand-Kaolinite Mixture, March, 116

Reddy, ES, Chapman, DN, and Sastry, VV: Direct Sheer Interface Test for Shaft Capacity of Piles in Sand, June, 199

Ringel, M: *see* Talesnick, ML, Katz, A, and Ringel, M

Ristow, GH: *see* Lu, N, Ristow, GH, and Likos, WJ

Rowe, RK, Lake, CB, and Petrov, RJ: Apparatus and Procedures for Assessing Inorganic Diffusion Coefficients for Geosynthetic Clay Liners, June, 206

S

Santamarina, JC: *see* Prada, J, Fratta, D, and Santamarina, JC

Sastry, VV: *see* Reddy, ES, Chapman, DN, and Sastry, VV

Saussus, DR, Frost, D, and Ashmawy, AK: Variations in Membrane Contact Patterns of Reconstituted Sand Specimens, Dec., 522

Shang, JQ and Masterson, KL: An Electrokinetic Testing Apparatus for Undisturbed/Remoulded Soils Under In-Situ Stress Conditions, June, 215

Shelp, ML and Yanful, EK: Oxygen Diffusion Coefficient of Soils at High Degrees of Saturation, March, 36

Siddiqui, SI, Drnevich, VP, and Deschamps, RJ: Time Domain Reflectometry Development for Use in Geotechnical Engineering, March, 9

Sivakumar Babu, GL and Fox, PJ: Model for Capillary-induced Radial Flow in Cohesionless Soils, Sept., 369

Sluis, WK: *see* Arulnathan, R, Boulanger, RW, Kutter, BL, and Sluis, WK

Sridharan, A. and Prakash, K.: Shrinkage Limit of Soil Mixtures, March, 3

Sridharan, A. and Prakash, K: Percussion and Cone Methods of Determining the Liquid Limit of Soils: Controlling Mechanisms, June, 236

Sture, S: *see* Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA

Subba Rao, KS, Sudhakar, MR, and Gangadhara, S: Swelling Behavior of a Desiccated Clay, June, 193

Sudhakar, MR: *see* Subba Rao, KS, Sudhakar, MR, and Gangadhara, S

Sutter, KG: *see* Feng, ZY and Sutter, KG

Swanson, RA: *see* Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA

T

Takahashi, M: *see* Zhang, M, Takahashi, M, Morin, RH, and Esaki, T

Talesnick, ML, Katz, A, and Ringel, M: An Investigation of the Elastic Stress-Strain Behavior of a Banded Sandstone and a Sandstone-Like Material, Sept., 257

Tang, GX and Graham, J: A Method for Testing Tensile Strength in Unsaturated Soils, Sept., 377

Tatsuoka, F: *see* Modoni, G, Flora, A, Mancuso, C, Viggiani, C, and Tatsuoka, F

Teh, CI: *see* Leong, WK, Chu, J, and Teh, CI

Thomas, P: *see* Khalifa, M-AOA, Wahyudi, I, and Thomas, P

Titi, HH, Mohammed, LN, and Tumay, MT: Miniature Cone Penetration in Soft and Stiff Clays, Dec., 432

Tumay, MT: *see* Titi, HH, Mohammed, LN, and Tumay, MT

U

Unal, E and Cakmakci, G: Laboratory Evaluation of Cemented Backfill Materials for Mines, Dec., 496

V

Viggiani, C: *see* Modoni, G, Flora, A, Mancuso, C, Viggiani, C, and Tatsuoka, F

W

Wahyudi, I: *see* Khalifa, M-AOA, Wahyudi, I, and Thomas, P

Wei, JQ: *see* El Neggar, MH and Wei, JQ

Wibowo, R: *see* Wong, RCK and Wibowo, R

Williams, DJ: *see* Rassam, DW and Williams, DJ

Wong, RC: Shear Deformation of Locked Sand in Triaxial Compression, June, 158

Wong, RCK and Wibowo, R: Tomographic Evaluation of Air and Water Flow Patterns in Soil Column, Dec., 413

X

Xi, F: *see* Paikowsky, SG and Xi, F

Y

Yanful, EK: *see* Shelp, ML and Yanful, EK

Z

Zhang, L: *see* McVay, MC, Birgisson, B., Zhang, L, Perez, A, and Putcha, S

Zhang, M, Takahashi, M, Morin, RH, and Esaki, T: Evaluation and Application of the Transient-Pulse Technique for Determining the Hydraulic Properties of Low-Permeability Rocks–Part 1: Theoretical Evaluation, March, 83

Zhang, M, Takahashi, M, Morin, RH, and Esaki, T: Evaluation and Application of the Transient-Pulse Technique for Determining the Hydraulic Properties of Low-Permeability Rocks–Part 2: experimental application, March, 91

Geotechnical Testing Journal
Subject Index
Volume 23, 2000

A

Acid rock drainiage
Oxygen Diffusion Coefficient of Soils at High Degrees of Saturation (Shelp, ML and Yanful, EK), March, 36

Adhesion
Interfacial Parameters and Work of Adhesion in Soil-Liquid Systems (Kaya, A, Lloyd, TB, and Fang, H-Y), Dec., 464

Air saturation
Tomographic Evaluation of Air and Water Flow Patterns in Soil Column (Wong, RCK and Wibowo, R), Dec., 413

Air-enry suction (AES),
A Dynamic Method for Determining the Soil Water Characteristic Curve for Coarse-Grained Soils (Rassam, DW and Williams, DJ), March, 67

Anhydrite
Effects of Calcium Sulfate on Swelling Potential of an Expansive Clay (Azam, S, Abduljauwad, SN, Al-Shayea, NA, and Baghabra Al-Amoudi, OS), Dec., 389

Anisotropy
An Investigation of the Elastic Stress-Strain Behavior of a Banded Sandstone and a Sandstone-Like Material (Talesnick, ML, Katz, A, and Ringel, M), Sept., 257
Anisotropic Stiffness Measurements in a Stress-Path Triaxial Cell (Kuwano, R, Connolly, TM, and Jardine, RJ), June, 141
Evaluation of Gravel Stiffness by Pulse Wave Transmission Tests (Modoni, G, Flora, A, Mancuso, C, Viggiani, C, and Tatsuoka, F), Dec., 506

Axisymmetric
Assessment of Localized Deformations in Sand Using X-Ray Computed Tomography (Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA), Sept., 274

B

Backfill testing
Laboratory Evaluation of Cemented Backfill Materials for Mines (Unal, E and Cakmakci, G), Dec., 496

Bender element test
New Tool for Shear Wave Velocity Measurements in Model Tests (Arulnathan, R, Boulanger, RW, Kutter, BL, and Sluis, WK), Dec., 444

Bentonite
Apparatus and Procedures for Assessing Inorganic Diffusion Coefficients for Geosynthetic Clay Liners (Rowe, RK, Lake, CB, and Petrov, RJ), June, 206

Biobarrier
The Influence of Biofilm on the Mechanical Behavior of Sand (Perkins, SW, Gyr, P, and James, G), Sept., 300

Biofilm
The Influence of Biofilm on the Mechanical Behavior of Sand (Perkins, SW, Gyr, P, and James, G), Sept., 300

C

Calcareous soils
Sample Preparation Technique for Artificially Cemented Soils (Ismail, MA, Joer, HA, and Randolph, MF), June, 171

Calcium sulfate
Effects of Calcium Sulfate on Swelling Potential of an Expansive Clay (Azam, S, Abduljauwad, SN, Al-Shayea, NA, and Baghabra Al-Amoudi, OS), Dec., 389

Calibration
Calibration of Testing Equipment for Reliable Small-Strain Deformation Measurements Using Synthetic Specimens (Kim, D-S and Kweon, G-C), Dec., 454

Capillarity
Model for Capillary-induced Radial Flow in Cohesionless Soils (Sivakumar Babu, GL and Fox, PJ), Sept., 369

Capillary head
Model for Capillary-induced Radial Flow in Cohesionless Soils (Sivakumar Babu, GL and Fox, PJ), Sept., 369

Cementation
Sample Preparation Technique for Artificially Cemented Soils (Ismail, MA, Joer, HA, and Randolph, MF), June, 171

Cemented backfill
Laboratory Evaluation of Cemented Backfill Materials for Mines (Unal, E and Cakmakci, G), Dec., 496

Clay
Percussion and Cone Methods of Determining the Liquid Limit of Soils: Controlling Mechanisms (Sridharan, A. and Prakash, K), June, 236

Clay soil
Miniature Cone Penetration in Soft and Stiff Clays (Titi, HH, Mohammed, LN, and Tumay, MT), Dec., 432

Compaction methods
A New Technique of Kneading Compaction in the Laboratory (Kouassi, P, Breysse, D, Girard, H, and Poulain, D), March, 72

Computed tomography
Assessment of Localized Deformations in Sand Using X-Ray Computed Tomography (Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA), Sept., 274

Computerized tomography
Tomographic Evaluation of Air and Water Flow Patterns in Soil Column (Wong, RCK and Wibowo, R), Dec., 413

Concrete
The Physicochemical Interaction Between PHPA Polymer Slurry and Cement Mortar (Ata, A and O'Neill, M.), June, 225

Cone penetration test
Miniature Cone Penetration in Soft and Stiff Clays (Titi, HH, Mohammed, LN, and Tumay, MT), Dec., 432

Contact patterns
Variations in Membrane Contact Patterns of Reconstituted Sand Specimens (Saussus, DR, Frost, D, and Ashmawy, AK), Dec., 522

Cyclic strain
Swelling Behavior of a Desiccated Clay (Subba Rao, KS, Sudhakar, MR, and Gangadhara, S), June, 193

© 2000 by the American Society for Testing and Materials

Cyclic test
Calibration of Testing Equipment for Reliable Small-Strain Deformation Measurements Using Synthetic Specimens (Kim, D-S and Kweon, G-C), Dec., 454

D

Damping ratio
Dynamic Properties of Granulated Rubber/Sand Mixtures (Feng, ZY and Sutter, KG), Sept., 338

Darcy
A New Device for Measuring Permeability Under High Gradients and Sinusoidal Gradients (Khalifa, M-AOA, Wahyudi, I, and Thomas, P), Dec., 404

Diffusion testing
Apparatus and Procedures for Assessing Inorganic Diffusion Coefficients for Geosynthetic Clay Liners (Rowe, RK, Lake, CB, and Petrov, RJ), June, 206

Direct shear testing
Direct Sheer Interface Test for Shaft Capacity of Piles in Sand (Reddy, ES, Chapman, DN, and Sastry, VV), June, 199

Drilled shaft
Performance of Drilled Shafts with Isolation Tubes in an Expansive Environment (Kim, MH, O'Neill, MW, and Kramer, SL), Sept., 345

Dynamic property
Dynamic Properties of Granulated Rubber/Sand Mixtures (Feng, ZY and Sutter, KG), Sept., 338

Dynamic test
Calibration of Testing Equipment for Reliable Small-Strain Deformation Measurements Using Synthetic Specimens (Kim, D-S and Kweon, G-C), Dec., 454

E

Elastic waves
Tomographic Detection of Low-Velocity Anomalies with Limied Data Sets (Velocity and Attenuation) (Prada, J, Fratta, D, and Santamarina, JC), Dec., 472

Electrokinetics
An Electrokinetic Testing Apparatus for Undisturbed/Remoulded Soils Under In-Situ Stress Conditions (Shang, JQ and Masterson, KL), June, 215

Embankments
Model Studies on Geocell Supported Embankments Constructed over a Soft Clay Foundation (Krishnaswamy, NR, Rajagopal, K, and Lathar, GM), March, 45

Expansive clay
Effects of Calcium Sulfate on Swelling Potential of an Expansive Clay (Azam, S, Abduljauwad, SN, Al-Shayea, NA, and Baghabra Al-Amoudi, OS), Dec., 389

Expansive soil
Performance of Drilled Shafts with Isolation Tubes in an Expansive Environment (Kim, MH, O'Neill, MW, and Kramer, SL), Sept., 345

Expansive soils
Swelling Behavior of a Desiccated Clay (Subba Rao, KS, Sudhakar, MR, and Gangadhara, S), June, 193

F

Fabric
Measurement of Uniformity and Anisotropy in Granular Materials (Muhunthan, B, Masad, E, and Assaad, A), Dec., 423

Fine-grained clays
The Accuracy of Hydrometer Analysis for Fine-Grained Clay Particles (Lu, N, Ristow, GH, and Likos, WJ), Dec., 487

Flow
A New Device for Measuring Permeability Under High Gradients and Sinusoidal Gradients (Khalifa, M-AOA, Wahyudi, I, and Thomas, P), Dec., 404

Forchheimer
A New Device for Measuring Permeability Under High Gradients and Sinusoidal Gradients (Khalifa, M-AOA, Wahyudi, I, and Thomas, P), Dec., 404

Frequency efect
Calibration of Testing Equipment for Reliable Small-Strain Deformation Measurements Using Synthetic Specimens (Kim, D-S and Kweon, G-C), Dec., 454

Full-scale horizontal load tests
Instrumentation of Bored Concrete Piles for Horizontal Load Tests (de Sousa Coutinho, AntonioGF, Emilio, FT, de Almeida Garrett, JL, and Cardoso, ET), Sept., 327

G

Geogrid
Elastic Modulus of Geogrid-Reinforced Sand Using Plate Load Tests (Gabr, MA and Hart, JH), June, 245

Geosynthetics
Elastic Modulus of Geogrid-Reinforced Sand Using Plate Load Tests (Gabr, MA and Hart, JH), June, 245

Geotechnical testing
An Electrokinetic Testing Apparatus for Undisturbed/Remoulded Soils Under In-Situ Stress Conditions (Shang, JQ and Masterson, KL), June, 215

Granular materials
Liquefaction and Instability of a Granular Fill Material (Leong, WK, Chu, J, and Teh, CI), June, 178

Gravel
Evaluation of Gravel Stiffness by Pulse Wave Transmission Tests (Modoni, G, Flora, A, Mancuso, C, Viggiani, C, and Tatsuoka, F), Dec., 506

Gypsum
Effects of Calcium Sulfate on Swelling Potential of an Expansive Clay (Azam, S, Abduljauwad, SN, Al-Shayea, NA, and Baghabra Al-Amoudi, OS), Dec., 389

H

Hydraulic conductivity
Model for Capillary-induced Radial Flow in Cohesionless Soils (Sivakumar Babu, GL and Fox, PJ), Sept., 369

Hydrometer analysis
The Accuracy of Hydrometer Analysis for Fine-Grained Clay Particles (Lu, N, Ristow, GH, and Likos, WJ), Dec., 487

I

Image analysis
Measurement of Uniformity and Anisotropy in Granular Materials (Muhunthan, B, Masad, E, and Assaad, A), Dec., 423

Image processsing
Particle Motion Tracking Utilizing a High-Resolution Digital CCD Camera (Paikowsky, SG and Xi, F), March, 123

Instrumentation of concrete piles
Instrumentation of Bored Concrete Piles for Horizontal Load Tests (de Sousa Coutinho, AntonioGF, Emilio, FT, de Almeida Garrett, JL, and Cardoso, ET), Sept., 327

Interface friction
Direct Sheer Interface Test for Shaft Capacity of Piles in Sand (Reddy, ES, Chapman, DN, and Sastry, VV), June, 199

Inverse problems
Tomographic Detection of Low-Velocity Anomalies with Limied Data Sets (Velocity and Attenuation) (Prada, J, Fratta, D, and Santamarina, JC), Dec., 472

Isolation tube
Performance of Drilled Shafts with Isolation Tubes in an Expansive Environment (Kim, MH, O'Neill, MW, and Kramer, SL), Sept., 345

J

Jetting
Lateral Load Behavior of Jetted Piles (Hameed, RA, Gunaratne, M, Putcha, S, Kuo, C, and Johnson, S), Sept., 358

L

Laboratory characterization of backfill
Laboratory Evaluation of Cemented Backfill Materials for Mines (Unal, E and Cakmakci, G), Dec., 496

Large-scale laboratory backfill specimen
Laboratory Evaluation of Cemented Backfill Materials for Mines (Unal, E and Cakmakci, G), Dec., 496

Lateral loads
Lateral Load Behavior of Jetted Piles (Hameed, RA, Gunaratne, M, Putcha, S, Kuo, C, and Johnson, S), Sept., 358

Liquefaction
Liquefaction and Instability of a Granular Fill Material (Leong, WK, Chu, J, and Teh, CI), June, 178

Load test
Elastic Modulus of Geogrid-Reinforced Sand Using Plate Load Tests (Gabr, MA and Hart, JH), June, 245

M

Matric suction
Discussion on "The Use of Miniature Pore Pressure Transducers in Measuring Matric Suction in Unsaturated Soils" by K. K. Muraleetharan and K. K. Granger (Marinho, FAM), Dec., 532

Membrane penetration
Variations in Membrane Contact Patterns of Reconstituted Sand Specimens (Saussus, DR, Frost, D, and Ashmawy, AK), Dec., 522

Microbial bacteria
The Influence of Biofilm on the Mechanical Behavior of Sand (Perkins, SW, Gyr, P, and James, G), Sept., 300

Mineralogical composition
Percussion and Cone Methods of Determining the Liquid Limit of Soils: Controlling Mechanisms (Sridharan, A. and Prakash, K), June, 236

Modulus
Calibration of Testing Equipment for Reliable Small-Strain Deformation Measurements Using Synthetic Specimens (Kim, D-S and Kweon, G-C), Dec., 454

N

Nondestructive testing
Tomographic Detection of Low-Velocity Anomalies with Limied Data Sets (Velocity and Attenuation) (Prada, J, Fratta, D, and Santamarina, JC), Dec., 472

O

Oedometer testing
The Influence of Biofilm on the Mechanical Behavior of Sand (Perkins, SW, Gyr, P, and James, G), Sept., 300

P

Permeameter
A New Device for Measuring Permeability Under High Gradients and Sinusoidal Gradients (Khalifa, M-AOA, Wahyudi, I, and Thomas, P), Dec., 404

Pile foundation
Load and Resistance Factor Design (LRFD) for Driven Piles Using Dynamic Methods—a Florida Perspective (McVay, MC, Birgisson, B., Zhang, L, Perez, A, and Putcha, S), March, 55

Pile groups
Instrumentation of Bored Concrete Piles for Horizontal Load Tests (de Sousa Coutinho, AntonioGF, Emilio, FT, de Almeida Garrett, JL, and Cardoso, ET), Sept., 327

Piles
Estimation of Post-Driving Residual Stresses (Alawneh, AS and Husein Malkawi, AI), Sept., 313
Lateral Load Behavior of Jetted Piles (Hameed, RA, Gunaratne, M, Putcha, S, Kuo, C, and Johnson, S), Sept., 358
Tomographic Detection of Low-Velocity Anomalies with Limied Data Sets (Velocity and Attenuation) (Prada, J, Fratta, D, and Santamarina, JC), Dec., 472

Plasticity
Percussion and Cone Methods of Determining the Liquid Limit of Soils: Controlling Mechanisms (Sridharan, A. and Prakash, K), June, 236

Polymer
The Physicochemical Interaction Between PHPA Polymer Slurry and Cement Mortar (Ata, A and O'Neill, M.), June, 225

Porosity
Apparatus and Procedures for Assessing Inorganic Diffusion Coefficients for Geosynthetic Clay Liners (Rowe, RK, Lake, CB, and Petrov, RJ), June, 206

R

Reclaimed soils
Laboratory and Field Shear Wave Measurement at a Reclaimed Site in West Taiwan (Chien, LK and Oh, YN), March, 21

Residual load
Estimation of Post-Driving Residual Stresses (Alawneh, AS and Husein Malkawi, AI), Sept., 313

Residual stresses
Estimation of Post-Driving Residual Stresses (Alawneh, AS and Husein Malkawi, AI), Sept., 313

Resin
Measurement of Uniformity and Anisotropy in Granular Materials (Muhunthan, B, Masad, E, and Assaad, A), Dec., 423

Rubber
Dynamic Properties of Granulated Rubber/Sand Mixtures (Feng, ZY and Sutter, KG), Sept., 338

S

Sand
Assessment of Localized Deformations in Sand Using X-Ray Computed Tomography (Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA), Sept., 274
Shear Deformation of Locked Sand in Triaxial Compression (Wong, RC), June, 158
The Influence of Biofilm on the Mechanical Behavior of Sand (Perkins, SW, Gyr, P, and James, G), Sept., 300

Sand-bentonite mixture
A Method for Testing Tensile Strength in Unsaturated Soils (Tang, GX and Graham, J), Sept., 377

Sand-kaolinite
Comparison of Internal and Surface Erosion Using Flow Pump Tests on a Sand-Kaolinite Mixture (Reddi, LN, Lee, IM, and Bonala, M), March, 116

Sandstones
An Investigation of the Elastic Stress-Strain Behavior of a Banded Sandstone and a Sandstone-Like Material (Talesnick, ML, Katz, A, and Ringel, M), Sept., 257

Sedimentation tests
The Accuracy of Hydrometer Analysis for Fine-Grained Clay Particles (Lu, N, Ristow, GH, and Likos, WJ), Dec., 487

Shaft capacity
Direct Sheer Interface Test for Shaft Capacity of Piles in Sand (Reddy, ES, Chapman, DN, and Sastry, VV), June, 199

Shear banding
Shear Deformation of Locked Sand in Triaxial Compression (Wong, RC), June, 158

Shear bands
Assessment of Localized Deformations in Sand Using X-Ray Computed Tomography (Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA), Sept., 274

Shear modulus
Dynamic Properties of Granulated Rubber/Sand Mixtures (Feng, ZY and Sutter, KG), Sept., 338
New Tool for Shear Wave Velocity Measurements in Model Tests (Arulnathan, R, Boulanger, RW, Kutter, BL, and Sluis, WK), Dec., 444

Shear wave velocity
New Tool for Shear Wave Velocity Measurements in Model Tests (Arulnathan, R, Boulanger, RW, Kutter, BL, and Sluis, WK), Dec., 444

Shrinkage limit
Shrinkage Limit of Soil Mixtures (Sridharan, A. and Prakash, K.), March, 3

Site characterization
Miniature Cone Penetration in Soft and Stiff Clays (Titi, HH, Mohammed, LN, and Tumay, MT), Dec., 432

Slurry
The Physicochemical Interaction Between PHPA Polymer Slurry and Cement Mortar (Ata, A and O'Neill, M.), June, 225

Soil
Tomographic Evaluation of Air and Water Flow Patterns in Soil Column (Wong, RCK and Wibowo, R), Dec., 413

Soil mechanics
An Electrokinetic Testing Apparatus for Undisturbed/Remoulded Soils Under In-Situ Stress Conditions (Shang, JQ and Masterson, KL), June, 215

Soil-liquid systems
Interfacial Parameters and Work of Adhesion in Soil-Liquid Systems (Kaya, A, Lloyd, TB, and Fang, H-Y), Dec., 464

Soils
A New Device for Measuring Permeability Under High Gradients and Sinusoidal Gradients (Khalifa, M-AOA, Wahyudi, I, and Thomas, P), Dec., 404

Stiffness
Evaluation of Gravel Stiffness by Pulse Wave Transmission Tests (Modoni, G, Flora, A, Mancuso, C, Viggiani, C, and Tatsuoka, F), Dec., 506

Stress
Liquefaction and Instability of a Granular Fill Material (Leong, WK, Chu, J, and Teh, CI), June, 178

Swelling
Swelling Behavior of a Desiccated Clay (Subba Rao, KS, Sudhakar, MR, and Gangadhara, S), June, 193

T

Tapered piles
Cyclic Response of Axially Loaded Tapered Piles (El Neggar, MH and Wei, JQ), March, 100

Tensile strength
A Method for Testing Tensile Strength in Unsaturated Soils (Tang, GX and Graham, J), Sept., 377

Time domain reflectrometry
Time Domain Reflectometry Development for Use in Geotechnical Engineering (Siddiqui, SI, Drnevich, VP, and Deschamps, RJ), March, 9

Tire chip
Dynamic Properties of Granulated Rubber/Sand Mixtures (Feng, ZY and Sutter, KG), Sept., 338

Tomography
Shear Deformation of Locked Sand in Triaxial Compression (Wong, RC), June, 158
Tomographic Detection of Low-Velocity Anomalies with Limied Data Sets (Velocity and Attenuation) (Prada, J, Fratta, D, and Santamarina, JC), Dec., 472

Torsion
An Investigation of the Elastic Stress-Strain Behavior of a Banded Sandstone and a Sandstone-Like Material (Talesnick, ML, Katz, A, and Ringel, M), Sept., 257

Transducers
Anisotropic Stiffness Measurements in a Stress-Path Triaxial Cell (Kuwano, R, Connolly, TM, and Jardine, RJ), June, 141

Transient pulse
Evaluation and Application of the Transient-Pulse Technique for Determining the Hydraulic Properties of Low-Permeability Rocks–Part 1: Theoretical Evaluation (Zhang, M, Takahashi, M, Morin, RH, and Esaki, T), March, 83

Transient-pulse
Evaluation and Application of the Transient-Pulse Technique for Determining the Hydraulic Properties of Low-Permeability Rocks–Part 2: experimental application (Zhang, M, Takahashi, M, Morin, RH, and Esaki, T), March, 91

Triaxial
Assessment of Localized Deformations in Sand Using X-Ray Computed Tomography (Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA), Sept., 274

Triaxial cell
Anisotropic Stiffness Measurements in a Stress-Path Triaxial Cell (Kuwano, R, Connolly, TM, and Jardine, RJ), June, 141

Triaxial testing
Sample Preparation Technique for Artificially Cemented Soils (Ismail, MA, Joer, HA, and Randolph, MF), June, 171
The Influence of Biofilm on the Mechanical Behavior of Sand (Perkins, SW, Gyr, P, and James, G), Sept., 300

U

Ultrasound
Tomographic Detection of Low-Velocity Anomalies with Limied Data Sets (Velocity and Attenuation) (Prada, J, Fratta, D, and Santamarina, JC), Dec., 472

Unsaturated soil
Discussion on "The Use of Miniature Pore Pressure Transducers in Measuring Matric Suction in Unsaturated Soils" by K. K. Muraleetharan and K. K. Granger (Marinho, FAM), Dec., 532

Unsaturated soils
A Method for Testing Tensile Strength in Unsaturated Soils (Tang, GX and Graham, J), Sept., 377

V

Velocity
Tomographic Detection of Low-Velocity Anomalies with Limied Data Sets (Velocity and Attenuation) (Prada, J, Fratta, D, and Santamarina, JC), Dec., 472

Void ratio
Assessment of Localized Deformations in Sand Using X-Ray Computed Tomography (Alshibli, KA, Sture, S, Costes, NC, Frank, ML, Lankton, MR, Batiste, SN, and Swanson, RA), Sept., 274

W

Waste tire
Dynamic Properties of Granulated Rubber/Sand Mixtures (Feng, ZY and Sutter, KG), Sept., 338

Wave
A New Device for Measuring Permeability Under High Gradients and Sinusoidal Gradients (Khalifa, M-AOA, Wahyudi, I, and Thomas, P), Dec., 404

Wave velocity
Evaluation of Gravel Stiffness by Pulse Wave Transmission Tests (Modoni, G, Flora, A, Mancuso, C, Viggiani, C, and Tatsuoka, F), Dec., 506